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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/723,668 | 11/26/2003 | Yan Liu | 20002/17587 | 8787 |

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| EXAMINER | |
|---|---|
| NGO, CHUONG D | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2193 | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/723,668 | LIU ET AL. | |
| | Examiner | Art Unit | |
| | Chuong D. Ngo | 2193 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *30 April 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,5-12,15-29 and 32-40* is/are rejected.

7)☒ Claim(s) *2-4,13,14, 30 and 31* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

**DETAILED ACTION**

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1,5-10,12,15-20,29 and 32-37 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Chovin et al. (4,928,720).

As per claims 1,10,12,18,29 and 37 Chovin et al discloses in figure 1 a generation of a delay time including determining a number of loops value (the number of hours that would be set to the counter 14) associated with a delay time and at least one characteristic value associated with a counter (13,12,11), determining a remaining count value (the number of minutes, second and 1/16 seconds that would be set to the counter (13,12,11) based on the number of loops value, and generating the delay time with the counter based on the number of loops value and the remaining count value as claimed.

As per claim 5-7,15,16,32,33 and 34, the initial count value is seen as one of the number of loop count value or the remaining count value.

As per claims 8, 9,17,35 and 36, Chovin et al. also discloses polling (reading) the counter for display.

4. Claims 11,19,20 and 38-40 rejected under 35 U.S.C. 103(a) as being unpatentable over Chovin et al. (4,928,720).

It is noted that Chovin et al. does not specifically discloses the generation of delay time for generating the delay time prior to a boot process, in a non-interrupt environment or being instructions stored in a flash memory. However, these limitations are merely obvious fields of applications and obvious environments implementing a generation of delay time of Chovin et al. and thus are obvious from Chovin et al.

5. Claims 1,5-12,15-29 and 32-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shal et al. (6,064,646) in view of Agarwala et al. (7,047,270).

As per claims 1,12,21,24-26 and 29, Shal et al. discloses in figure 2 a generation of a delay time including determining (54,60) a count value associated with a delay time and at least one characteristic value associated with a counter, and generating the delay time with the counter (62) and a comparator (58) based on the count value (when the first counter value equals the register value triggering the first interrupt service, abstract, 15-18). It is noted that Shal et al. does not discloses determining a number of loops value representing a number of counter rollover events associated with a delay time. However, Agarwala et al discloses in figure 4, a

circuit (403) for counting the number of rollover events of a counter (401) to extent the counting range beyond the capacity of the counter. It would have been obvious to a person of ordinary skill in the art to provide Shal et al with a circuit for counting the number of counter rollover events as taught by Agarwala et al in order to increase the counting range and thus increase the delay time range beyond the capacity of the counter. Therefore, it would have been also obvious to a person of ordinary skill in the art to determine a number of counter rollover events associated with an extended delay time beyond the capacity of the counter as claimed.

As per claim 5-7,15,16,22,23 and 32-34 the first counter value (abstract, line 14) is corresponding to the claimed initial count value that the determination of the number of loops values and the remain count values are clearly based on.

As per claims 8 and 9,17,35 and 36, Shal et al. also discloses polling (reading) the counter for comparison.

As per claim 10,18 and 37 a determining (54) of the corresponding some most significant bits/digits of the on time (which indicated the number rollovers of the remaining least significant bits/digits) is corresponding to the claimed determining a number or rollover events to be generated by the counter.

As per claims 11,19,20,27,28 and 38-40, it is noted that Shal et al. does not specifically discloses the generation of delay time for generating the delay time prior to a boot process, in a non-interrupt environment or being instructions stored in a flash memory. However, these limitations are merely obvious fields of applications and obvious environments implementing a generation of delay time of Shal et al. and thus are obvious from Shal et al.

6. Claims 2-4,13,14, 30 and 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Applicant's arguments filed on 04/30/2008 have been fully considered but they are not persuasive.

applicant's arguments regarding to the rejection based on Chovin et al. are not persuasive because as set forth in the rejection only the combination of counters 11,12 and 13 is viewed as the claimed counter, and the counter 14 is for counting the number of rollover events of the counter (rollover events of the combination of counters 11,12 and 13). Noting that figures 2 and 3 of Chovin et al clearly show that the hour counter 14 is clearly for counting the number of rollover events of the combination of counters 11,12 and 13.

Applicant's arguments with respect the rejection based on Shal et al have been considered but are moot in view of the new ground(s) of rejection.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuong D. Ngo whose telephone number is (571) 272-3731. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lewis, Jr. A. Bullock can be reached on (571) 272-3759. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chuong D Ngo/
Primary Examiner, Art Unit 2193

1/14/2009